CITY COUNCIL
ATLANTA, GEORGIA

06- R -2604

A RESOLUTION
BY CITY UTILITIES COMMITTEE

A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED WITH METCALF EDDY/CARDOZO, JV, FOR FC-7619-03E, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR A LOCATION INVENTORY STUDY OF THE STRUCTURES IN THE CITY OF ATLANTA SEPARATE STORM SEWER SYSTEM, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED THIRTY EIGHT THOUSAND TWO HUNDRED NINETY ONE DOLLARS AND TWENTY TWO CENTS ($438,291.22); ALL CONTRACTED WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER: 2J01 (WATER & WASTEWATER REVENUE FUND) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q86001 (NPDES (MS4) COMPLIANCE/POLLUTION DISCHARGE); AND FOR OTHER PURPOSES.

WHEREAS, the City of Atlanta ("City") did enter into FC-7619-03E, Annual Contract for Architectural and Engineering Services; and

WHEREAS, the Commissioner of the Department of Watershed Management requires a Location Inventory Study of the City's Storm Water Structures for the purpose of consolidating existing storm water structure data and converting the data into a format that is accessible through a Geographic Information System, in an amount not to exceed Four Hundred Thirty Eight Thousand Two Hundred Ninety One Dollars and Twenty Two Cents ($438,291.22); and

WHEREAS, the Commissioner of the Department of Watershed Management and the Chief Procurement Officer have recommended the issuance of a notice to proceed with Metcalf Eddy/Cardoza, JV, for FC-7619-03E, Annual Contract for Architectural and Engineering Services, for the Location Inventory Study.

THE CITY COUNCIL OF THE CITY OF ATLANTA, GEORGIA, HEREBY RESOLVES, that the Mayor is authorized to issue a notice to proceed with Metcalf Eddy/Cardoza, JV ("Metcalf Eddy"), for FC-7619-03E, Annual Contract for Architectural and Engineering Services, Four Hundred Thirty Eight Thousand Two Hundred Ninety One Dollars and Twenty Two Cents ($438,291.22).

BE IT FURTHER RESOLVED, that the Chief Procurement Officer is directed to prepare an appropriate agreement for execution by the Mayor.

BE IT FURTHER RESOLVED, that all contracted work will be charged to and paid from Fund, Account and Center Number 2J01 (Water & Wastewater Revenue Fund) 524001 (Consultant/Professional Services) Q86001 (NPDES (MS4) Compliance/Pollution Discharge).

BE IT FINALLY RESOLVED, that this notice to proceed will not become binding on the City and the City will incur no liability nor obligation under it until it has been executed by the Mayor, attested to by the Municipal Clerk, approved as to form by the City Attorney and delivered to Metcalf Eddy.

Part II: Legislative White Paper:

A. To be completed by Legislative Counsel:

Committee of Purview: City Utilities Committee
Caption:

A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED WITH METCALF EDDY/CARDOZO, JV, FOR FC-7619-03E, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR A LOCATION INVENTORY STUDY OF THE STRUCTURES IN THE CITY OF ATLANTA SEPARATE STORM SEWER SYSTEM, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED THIRTY EIGHT THOUSAND TWO HUNDRED NINETY ONE DOLLARS AND TWENTY TWO CENTS ($438,291.22); ALL CONTRACTED WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER: 2J01 (WATER & WASTEWATER REVENUE FUND) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q86001 (NPDES (MS4) COMPLIANCE/POLLUTION DISCHARGE); AND FOR OTHER PURPOSES.

Council Meeting Date: December 4, 2006

Requesting Dept.: Department of Watershed Management

B. To be completed by the department :

1. Please provide a summary of the purpose of this legislation (Justification Statement).

Task Order- Location Inventory under FC-7619-03F, Annual Contract for Architectural and Engineering Services with Metcalf and Eddy/Cardozo Engineering, JV, providing services for a Storm Water Structure Inventory Study for the purpose of consolidating existing storm water structure inventory data and converting the data into a format that is accessible through a Geographic Information System (GIS) in an amount not to exceed $438, 291.22.

2. Please provide background information regarding this legislation.

3. If Applicable/Known:

(a) Contract Type (e.g. Professional Services, Construction Agreement, etc): Professional Services

(b) Source Selection:

(c) Bids/Proposals Due:

(d) Invitations Issued:

(e) Number of Bids:

(f) Proposals Received:

(g) Bidders/Proponents:

(h) Term of Contract:

4. Fund Account Center:

5. Source of Funds:

6. Fiscal Impact:

7. Method of Cost Recovery:

This Legislative Request Form Was Prepared By: wcanidate

LEGISLATIVE SUMMARY

TO: City Utilities Committee

CAPTION

A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED WITH METCALF EDDY/CARDOZO, JV, FOR FC-7619-03E, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR A LOCATION INVENTORY STUDY OF THE STRUCTURES IN THE CITY OF ATLANTA SEPARATE STORM SEWER SYSTEM, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED THIRTY EIGHT THOUSAND TWO HUNDRED NINETY ONE DOLLARS AND TWENTY TWO CENTS ($438,291.22); ALL CONTRACTED WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER: 2J01 (WATER & WASTEWATER REVENUE FUND) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q86001 (NPDES (MS4) COMPLIANCE/POLLUTION DISCHARGE); AND FOR OTHER PURPOSES.

Committee Meeting Date:	**November 28, 2006**
Council Meeting Date:	**December 4, 2006**
Requesting Dept.:	**Watershed Management**
Contract Type:	Professional Services RFP
Advertisement:	October 26, 2003
Bids/Proposals Due:	January 7, 2004
Invitations Mailed:	146
Bids/Proposals Received:	12
	Arcadis/BPA-(Brindley Pieters & Associates) – Joint Venture Atlanta Architects & Engineers, Joint Venture Atlanta Services Group, a Joint Venture Infrastructure Partners-JointVenture (B & Jackson/ HDR/ Malcom Pirnie) Brown and Caldwell/Deloan Hampton & Associates/Long Engineering Inc. - Joint Venture CH2M Hill/Williams-Russell and Johnson – Joint Venture Earthtech/IMCo Joint Venture HTL - Harrington, Tetra Tech & Lowe-Joint Venture JP² (Jacobs, Prad, PBS&J) – Joint Venture Metcalf & Eddy/Cardozo Engineering-Joint Venture Parsons Brinckerhoff & Khafra-Joint Venture Shaw Environmental Inc. /AIM Partners, PLC- JV
Bidders/Proponents:	(1) CH2M Hill/Williams-Russell and Johnson

(2) Atlanta Services Group
(3) JP2 (Jacobs, Prad, PBS&J)
(4) Shaw/ Aim, Joint Venture
(5) Metcalf & Eddy/Cardozo Engineering, Joint Venture
(6) Arcadis/Brindley Pieters & Associates, Joint Venture

Contractor: Metcalf & Eddy/Cardozo Engineering, Joint Venture

Estimated Value: $438,291.22

Scope Summary: **THE CITY OF ATLANTA (COA) IS UNDER A CONSENT DECREE TO ELIMINATE SEWER SPILLS AND RESTORE THE STRUCTURAL INTEGRITY OF ITS SEWER SYSTEM.**

Background: Original executed on May 17, 2004, expired on May 16, 2006

A Ninety Day extension was executed on May 22, 2006 and expired August 17, 2006

Renewal Agreement No. 1 was executed on August 29, 2006 expires on August 28, 2007

Evaluation Team: DPRCA, DWM, DPW, DPCD, OCC and Risk Management

Term of Contract: Two (2) years with an option to renew for three (3) one (1) year periods

Fund Account Centers: 2J01 (WATER & WASTEWATER REVENUE FUND) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q86001 (NPDES (MS4) COMPLIANCE/POLLUTION DISCHARGE)

Prepared By: Anthony Stanley

Contact Number: 404-330-6384

Project Participation:

Metcalf & Eddy/Cardozo Engineering, Inc. a JV (15 pts.)		
Cardozo Engineering	FBE	20%
Eagle Environmental Group	FBE	4%
P.M. Holmes & Associates	FBE	2%
Street Smarts	FBE	1%
Construction Control Services	FBE	1%
Thacker Operating Co.	AABE	10%
MHR International	AABE	20%
Mosby Law Group	AABE	5%
Participation Total		**63%**

SHIRLEY FRANKLIN
MAYOR

CITY OF ATLANTA

55 TRINITY AVENUE., SW, SUITE 5400, SOUTH BLDG.
ATLANTA, GEORGIA 30303-0324
OFFICE (404) 330-6081
FAX (404) 658-7194

DEPARTMENT OF
WATERSHED MANAGEMENT
ROBERT J. HUNTER
Commissioner

October 11, 2006

TO: Adam L. Smith, Chief Procurement Officer
Department of Procurement

FROM: Robert J. Hunter, Commissioner
Department of Watershed Management

RE: **LEGISLATIVE REQUEST**
FC-7916-03E, Location Inventory Study of the Structures in the City of Atlanta Separate Storm Sewer System

Contractor: Mecalf & Eddy and Cardoza Engineering

Attached is a proposed scope and budget submitted by ***Mecalf & Eddy and Cardoza Engineering*** for A/E services required for subject project. Please prepare the appropriate legislation (**Cycle 21 – December 4, 2006)** for the above-referenced contract. Attached is a copy of the requisition identifying the appropriate fund-account-center number.

If you have any questions concerning this matter, please feel free to contact Sabrina D. Watts, Watershed Manager, at (404) 330-6955, Sally Mills, Deputy Commissioner, at (404) 330-6459 or Willie Canidate, Contracting Officer, Sr., at (404) 330-6335.

Your assistance in this matter is requested and appreciated.

/wc

c: Sheila Pierce, Deputy Commissioner, DWM
Sammy Goodson, Deputy Commissioner, DWM
Cathy Martin, Deputy Chief Procurement Officer, DOP
Megan Middleton, Legislative Counsel, DOL
April Daniels, Financial Analyst, DF
Sabrina D. Watts, Watershed Manager, DWM
Maisha Land, Legislative Liaison, DWM
Richard Chime, Project Manager, DWM
Willie Canidate, Contracting Officer, Sr., DWM
File

Metcalf & Eddy and Cardozo Engineering
A Joint Venture

1201 Peachtree Street NE, 400 Colony Square, Suite 1104
Atlanta, GA 30361 Phone: (404) 685-3561 Fax: (404) 881-6329

October 16, 2006

Ms. Sally Mills, Esq.
City of Atlanta
Deputy Commissioner
Bureau of Watershed Protection
68 Mitchell Street, S.W.
Suite 5900
Atlanta, Georgia 30318

RE: Location Inventory Study
City of Atlanta Storm Water Structures
FC-7619-03E
Scope of Work/Cost Proposal

Dear Ms. Mills:

In accordance with the previously approved contract agreement between the City of Atlanta (COA) and the Metcalf & Eddy / Cardozo Engineering Joint Venture (M&E/CE JV), we are pleased to offer you the following Scope of Work for assisting the City in creating an inventory of the City's stormwater structures that is accessible through the City's Geographic Information System (GIS).

Under this proposal, the M&E/CE JV team will perform select stormwater inventory tasks for select stormwater basins, as requested by the City. Such work is anticipated to be released on a basin-by-basin basis with major portions of the work for entire basins being released at one time. The work to be performed by the M&E/CE JV team shall not exceed $438,291.22.

Background

The purpose of this project is to inventory the City's stormwater structures that have not previously been mapped and to convert this information, as well as previously obtained storm water structure inventory information, into a GIS format that can be readily updated and utilized by the City. Anticipated uses of the inventory include the following:

1 Improve response time to customer calls regarding spills, localized flooding, etc.
2 Improve maintenance programs
3 Expand existing public information database
4 Assist in planning and forecasting
5 Manage and track assets
6 Satisfy MS-4 NPDES Permit Program requirements for initial inventory of structures.

Based on estimates provided in the City's May 27, 2005 Storm Water Management Program (SWMP) submittal, the City of Atlanta's storm water drainage area is approximately 133.2 square miles, and may include up to 60,931 structures covering ten (10) storm water drainage basins. In an effort to understand the current state of the City's storm water infrastructure, the City has previously contracted with the M&E/CE JV team to locate the storm water structures in several of the storm water drainage basins located within the City limits. These areas included the North and South Fork Sub-basins of the Peachtree Creek drainage basin and the Camp Creek drainage basin. Metcalf & Eddy has also conducted inventories of the Intrenchment Creek and Sandy Creek basins under a separate contract. In combination, these basins cover approximately 14.2 square miles and include 9,915 structures.

This project consists of the development of a city wide storm water system inventory for the city's drainage basins. The project limits consist of an approximate area of 119 square miles, and could include upwards of 54,441 storm water drainage structures. Based on field results to date, the JV team has revised the total number of remaining structures to be inventoried from 54,441 to 44,764. Of these structures approximately 60% are anticipated to be publicly owned, or approximately 27,000 total structures. The City's GIS section has recently provided additional data that suggests the number of storm water structures associated with the City's combined sewer system could include an additional 14,779 structures.

Although the general perception is often that the City is responsible for the entire storm water system within the City, such is not the case. Rather, the storm water structures that are the responsibility of the City consist primarily of storm water structures that have been constructed to protect public safety in the transportation corridors by efficiently removing water from the right of ways. These structures are typically located in the public right-of-way (excluding federal and state right-of-way). In addition, the City is responsible for storm water structures that have been dedicated to the City. As is clearly stated in Section 74-108 of the City of Atlanta Code of Ordinances, "All storm water management facilities and Best Management Practices (BMP) privately owned and maintained, shall continue to be owned and maintained by the private owner unless the City expressly accepts the facility in writing, for City ownership and/or maintenance." As such, a large portion of the existing storm water infrastructure has been developed for the benefit of private property, and is not dedicated to public use.

For the purpose of creating the stormwater inventory described herein, where information on both and public and private structures have previously been collected, such information will be included in the inventory. For areas in which information remains to be collected, the focus will be on public structures only.

Objectives

The objectives of this Scope of Work are to:

Field survey municipal storm water structures in those areas where storm water structure mapping has not been conducted to date, or in those areas where the historical storm water structure maps can not be found.

- Incorporate the field data and the previously collected storm water structure inventory information into GIS shape files that can be directly uploaded into the City's GIS system.

- Provide the City with a comprehensive accounting of all public storm water structures.

- Produce summary tables compatible with the City's Maximo database management system, and geo-database for GIS mapping purposes.

Project Approach

As noted above, the City's intent is to create an inventory of the municipal stormwater structures located throughout the entire City of Atlanta. This work will be accomplished using multiple resources including City forces and outside contractors. Under this proposal, the M&E/CE JV team will perform select stormwater inventory tasks for select stormwater basins, as requested by the City. Such work is anticipated to be released on a basin by basin basis with major portions of the work for entire basins being released at one time. The work to be performed by the M&E/CE JV team shall not exceed $438,291.22. This is only a portion of the resources required for this effort which has been estimated at $509,331. Payment for the work shall be based upon the unit prices included in **Table 2** as extended into overall basin estimates included in **Table 3.**

In order to accomplish the Objectives stated above, the specific activities will be grouped within the following five major Tasks:

- Task 1 Perform field survey/inventory of specified areas, as determined by the City

- Task 2 Scan and Geo-reference existing maps into GIS format for electronic mapping

- Task 3 Develop comprehensive GIS database of storm water structures

- Task 4 Project Management

- Task 5 Deliverables

Data Needs

The following information will be required from the City for each basin, or portion of basin, for which work is requested:

- Copies of the available storm water structure maps

- A copy of the available attribute data for the structures which are currently included on the maps

- A complete electronic copy of the City's GIS baseline grid maps which are pertinent to the study area, including all appropriate baseline information.

- A complete listing of all private streets located within the study area.

- A sample of Maximo data entry format/template, etc. to use as a guide for setting up the data spread sheets.

This information shall be provided at the time a basin is released for work. Any delays in providing the requested information may adversely impact the delivery schedule of the final documents associated with the basin.

The following Scope of Work further defines the activities to be accomplished under each Task.

Scope of Work

As the City assigns the stormwater structure inventory work to the M&E/CE JV, the City will provide the M&E/CE JV team with the initial data which will be used to create the inventory. These data resources include the following:

- CH2M Hill Atlanta Drainage Basin Study dated May 1988

- Intrenchment Creek Storm Sewer Inventory dated May 1999

- Sandy Creek Storm Sewer Inventory dated April 2004

- South Fork of Peachtree Creek Storm Sewer Inventory dated December 2005

- North Fork of Peachtree Creek Storm Sewer Inventory – work in progress

- Camp Creek Storm Sewer Inventory – work in progress

The study through which the stormwater inventory information was generated determines the amount of storm water structure baseline data which currently exists for the drainage basins. Some of this information can be translated directly into the overall inventory while some areas will require conversion of Mylar maps to electronic files, field / survey efforts to locate and identify appropriate structures, etc. Based on preliminary information provided by the City, the type of data available for each drainage basin is described below. These basins are grouped into three tiers, based on the increasing level of effort required to complete the inventory process. **Table 1**, which follows the descriptions of the data available for the basins, summarizes the data available for each basin while **Table 3** presents an approximate cost for the remaining work to be completed in the basins. The per basin costs presented in **Table 3** are based on the estimated number of structures located in the basin and the type of work remaining to be performed in the basin, and are estimates only.

Tier 1 This activity will require the least amount of effort to complete as a majority of the data has been tabulated under other authorized Task Orders.

> *#1 Camp Creek*: Field survey is complete, all data available electronically, private and public domain assessments complete (near future). A total of 1,400 structures have been identified. Transfer location data into GIS shape files, transfer records data into database file.

#2 North Fork Sub-basin of Peachtree Creek: Field survey is complete, all data available electronically, private and public domain assessments complete. A total of 420 structures have been identified. Transfer location data into GIS shape files, transfer records data into database file.

#3 South Fork Sub-basin of Peachtree Creek: Field survey is complete, all data available electronically, private and public domain assessments complete. A total of 778 structures have been identified. Transfer location data into GIS shape files, transfer records data into database file.

#4 Sandy Creek: Field survey is complete, and electronic data sheets available. Private and public domain assessments would be performed as part of this office exercise. A total of 1,888 structures have been identified. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database file.

Tier 2 This activity will require more effort as a good deal of the existing mapped data must be transferred manually into the GIS format.

#5 Intrenchment Creek: Field survey complete, PDF dual maps available, private and public domain assessments would be performed as part of this office exercise. A total of 5,429 structures have been identified. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database file.

#6 Nancy Creek: City mapping data available in single PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 2,500 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database file.

#7 Proctor Creek: City mapping data available in dual PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 6,000 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database file.

#8 Peachtree Creek: City mapping data available in dual PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 11,250 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database files.

#9 Indian Creek Sub-basin of Peachtree Creek: City mapping data available in dual PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 740 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into

GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database files.

#10 South River: City mapping data available in elevation PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 7,900 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database files.

#11 Utoy Creek: City mapping data available in dual PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 4,700 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database files.

#12 Federal Prison Creek Sub-basin of South River: City mapping data available in dual PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 1,380 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database files.

#13 Terrell Creek: City mapping data available in dual PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 875 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database files.

#14 Sugar Creek: City mapping data available in elevation PDF maps, private and public domain assessments would be performed as part of this office exercise. A total of 1,920 structures were estimated from the MS-4 SWMP Report. Structures will be located from existing maps and transferred into GIS shape files. Based upon available location coordinates, a determination will be made as to structure classification (public or private). These records will be placed into the database files.

Combined Sewer Areas: Locations of structures available through GIS, private and public domain assessments could be performed as part of an office exercise. A total of 14,779 combined sewer structures have been estimated here, based on information provided by the City's GIS support group. The City may prefer to use internal staff to evaluate these structures based on availability of resources and other information, however the M&/CE JV is capable of handling this task should the City determine that additional assistance would be required here.

Tier 3 These areas are totally lacking any previous map and/or storm sewer infrastructure data. These activities will require field location and condition assessments, which have been more fully described in Task 1 contained within this scope of services

#15 Long Island: Currently, there is no known inventory or mapping data available for this drainage basin. This data will have to be obtained through traditional field survey/assessment efforts. The project area is estimated at 3.3 square miles and the estimated number of structures is approximately 396.

#16 West Peachtree & Nancy Creek: Currently, there is no known inventory or mapping data available for this portion of these drainage basins. This data will have to be obtained through traditional field survey/assessment efforts. The project area is estimated at 3.2 square miles and the estimated number of structures is approximately 384.

TABLE 1
GIS INVENTORY

NUMBER	DRAINAGE BASIN/SUBBASIN	INVENTORY DATE	# OF STRUCTURES	PDF SINGLE MAPS*	PDF DUAL MAPS**	PDF ELEVATION MAPS***	PUBLIC OR PRIVATE	GIS
1	Camp Creek	2006	1,400	●	–	–	●	●
2	North Fork, (Peachtree Creek)	2006	420	●	–	–	●	●
3	South Fork, (Peachtree Creek)	2005	778	●	–	–	●	●
4	Sandy Creek	2004	1,888	●	–	–	–	●
5	Intrenchment Creek	1999	5,429	–	●	–	–	–
6	Nancy Creek	1998	2,500	–	●	–	–	–
7	Proctor Creek	1991	6,000	–	●	–	–	–
8	Peachtree Creek	1990	11,250	–	●	–	–	–
9	Indian Creek (Peachtree Creek)	1986	740	–	●	–	–	–
10	South River	1986	7,900	–	–	●	–	–
11	Utoy Creek	1986	4,700	–	●	–	–	–
12	Fed. Prison Creek (South River)	1986	1,380	–	●	–	–	–
13	Terrell Creek	1985	875	–	●	–	–	–
14	Sugar Creek	1969	1,920	–	–	●	–	–
15	Long Island	–	396	–	–	–	–	–
16	West Peachtree & Nancy Creek	–	384	–	–	–	–	–

** **PDF SINGLE MAP** shows structural numbers (Index Format) and elevations (Elevation Format) on the same map.*

*** **PDF DUAL MAP** shows structural numbers (Index Format) on one map and elevations (Elevation Format) on another map.*

**** **PDF ELEVATION MAP** shows only elevations (Elevation Format) on the map (South River Basin) and **no** structural numbers (Index Format)*

Task 1: Perform field survey/inventory of specified areas, as determined by the City

1.1 **Field Data Collection.** The M&E/CE JV team will manage and execute field surveys for those basins, or portions of basins, where field work is requested by the City. Prior to initiating any field work, an SOP will be developed for performing the field work (see Task 4). Payment for field work will be on a per structure basis, and includes all work necessary to collect, id, attribute and perform QA/QC on the field data such that the GIS layers for the portions of the basins investigated through fieldwork are generated. The unit prices included in this proposal are based on the assumption that the work required to collect field data in accordance with the SOP aligns with the following:

- The field crews will consist of (two man) survey teams with multiple crews assigned on an as needed basis.
- The survey teams will locate the vertical and horizontal datum of all observed structures for incorporation into the inventory maps. The level of vertical accuracy shall be to within 3 feet. This may be achievable through high-quality global positioning (GPS) – hand held equipment.
- In those areas where GPS signals may be interfered with by overhead canopy or other obstructions, the field teams will document these situations.
- Procedures will be established for interpolating a location from other known location coordinates.
- This field effort will be limited to identifying publicly owned structures located within the observable public right of way which shall be considered to be approximately 15 feet from the back of curb for stormwater inlets and within 25 feet of the back of curb for stormwater outlets. Stormwater outlets which are known to drain to waters of the state and are located within the 25 feet of the waterway shall also be documented.
- If an unobstructed view to get an accurate measurement cannot be obtained, due to private property obstructions or other limiting conditions, this will be noted in the summary report. In addition, the survey teams will conduct a cursory condition assessment of the structure and record all visual observations. No opening up of these structures will be provided for under this task.

Task 2: Geo-Reference Existing PDF Maps Into GIS Format for Mapping

The City of Atlanta currently has a collection of 252 maps in PDF format which provide valuable storm water structure information throughout a major portion of the City's incorporated limits. As part of the stormwater inventory process, this data will be converted into GIS format. The steps involved in this process include:

2.1 **Drawing Scan.** This task involves scanning the Mylar's of the previously performed storm water inventory work into a .tiff file for further processing. The M&E/CE JV team is prepared to complete this task if it has not been performed previously either by City staff or their designated contractor. The scanning procedure has been estimated as a separate per unit exercise.

2.2 **Geo-Reference.** The first step will be to set the sheet control, via four corner points, for each individual .tiff sheet. The sheet can then be further Geo-referenced by identifying additional horizontal control on the map and performing a rectification.

2.3 **Capture Stormwater Structures from Georeferenced Index Maps**. Each structure will then be digitized. The digitization falls under two categories:

a). Assign ID's to the stormwater structures GA. Tech. has already digitized.

b). Digitize stormwater structures from georeferenced maps and assign ID's. Under this activity the digitization of the pipelines between the structures is included in the per structure unit price. The digitization will be performed in such a manner that the direction of flow will be provided between structures, based on attribute data, topography, and other available resources.

The per structure unit prices for this work include all QA/QC procedures required to ensure that 98% of the digitized structures and ID assignments are captured and correctly assigned.

Task 3: Develop Comprehensive Database of Storm Water Structures

Once all of the storm water structure data has been digitized and the stormwater structure ID's have been assigned, the stormwater structure attributes and designations will be determined and attached to the structures.

3.1 **Assign attributes to digitized stormwater structures**. This activity involves scanning the CH2M stormwater inventory books, converting to text (in excel format) and linking the attributes to the structures using GIS. Please note that this activity is limited to the attribute information included in the CH2M stormwater inventory books. Should it become evident that there is additional technical information associated with attributes of the stormwater structures that is not included in the CH2M stormwater inventory books, such information shall be brought to the attention of the City. The addition of the additional attribute data to the GIS database, however, shall be considered an out-of-scope activity. No work shall be performed to include such data unless the work, and the budget for the work, is approved by the City prior to implementation of the work.

3.2 **Assign Public vs. Private Designation**. Under this activity, general GIS overlay and buffering techniques will be developed and applied such that each stormwater structure is designated and tagged as a public or private structure, wherever possible. The City may request that the M&E/CE JV team provide additional services for purposes of making public or private domain determinations in those situations where clear cut determinations can not be made based on site specific circumstances. These specific instances will be based on a case by case evaluation, and unit pricing covering this task is provided in the summary tables.

Prior to initiating this activity an SOP for designating stormwater structures as public or private will be developed (see Task 4). The unit prices included in this proposal are based on the assumption that the SOP for assigning public and private stormwater structure designations can be achieved using GIS overlay and buffering techniques for structures which are being inventoried from existing data, and that field verification of the public and private stormwater structure designation will be performed for structures for which field information is being obtained. Furthermore, the unit prices included in this proposal are based on the assumption that the SOP for assigning public and private stormwater structure will include criteria along the lines of the following:

- All storm water structures located within the street limits, back of curbing, sidewalk, up to and including an additional 15 feet in back of curb, will be identified as public structures.
- All interconnecting piping between two public structures will be considered publicly owned provided: it is also located within the right of way limits, including the 15 feet from back of curb.
- All outfall structures located within 25 feet from back of curb, and which clearly are piped directly from publicly owned inlet structures located within the right of way, will be considered public structures.

- All storm water inlets located beyond 15 feet from back of curb, including private extension piping will be considered private structures.
- Outfalls draining to known waters of the state and located within 25 feet of the waterway will be considered public structures.
- Interconnecting pipelines, flumes, and other man made conveyance structures, located between a public and private structure will be considered public for that portion located within the right of way and up to 15 feet beyond the back of curb. All such structures located beyond 15 feet from back of curb, will be considered private structures.
- All storm water inlet structures located as part of the City's combined sewer system will be identified as public and also have separate ID numbers so that these structures may be tracked separately.
- All questionable connections will be identified separately, and immediately brought to the attention of the City's designated Project Manager.

3.3 **Assign Federal/State/City Designation**. Under this activity general GIS overlay and buffering techniques will be developed and applied such that each public stormwater structure is designated and tagged as a federal (e.g. DOT), state of Georgia, or City of Atlanta stormwater structure. Prior to initiating this activity an SOP for designating stormwater structures federal, state or City will be developed (see Task 4). The unit prices included in this proposal are based on the assumption that the SOP for assigning federal, state or City designations can be achieved using GIS overlay and buffering techniques for structures which are being inventoried from existing data, and that field verification of the federal, state or City designation will be performed for structures for which field information is being obtained. Furthermore, the unit price for assigning federal, state or City designations is based on the assumption that the SOP for assigning federal, state or City designations will include criteria similar in the level of detail to the criteria used to determine the public vs. private designation.

3.4 **GIS Shape Files.** Once all data has been developed electronically, the geo-database will be stored in GIS shape files which will be provided to the City for uploading into the City's GIS base map database. The city may want to have the data provided in a specific geodatabase format and this will be determined closer to time of delivery.

The unit prices for this work included all QA/QC procedures required to ensure that 98% of the attribute and designation information is captured and correctly assigned.

Task 4: Project Management

The M&E/CE JV team will designate a Task Manager who will act as the team's representative for the project, and who will be the single point of contact between the City and the M&E/CE JV team for matters concerning the project. The Task Manager will be responsible for the management of the team's efforts and coordination of subcontractors to accomplish the work described in this document, and coordination with the City Project Manager.

The Project Management effort consists of:

4.1 **Kickoff Meeting.** This meeting will be held at City Hall or other agreed location. The City will specify the time and date of the meeting. A proposed Project Work Plan for accomplishing the study effort and the major schedule milestones will be presented by the M&E/CE JV team at this meeting.

The proposed format of deliverables will be discussed at this meeting. Structure identification, numbering and symbols will be established. Modifications of these established numbering systems subsequent to the initiation of data collection and/or conversion will be considered a change to the contract, and requires a scope change. Minutes of this meeting will be prepared by the M&E/CE JV team for review and approval by the City.

4.2 **Project Work Plan.** A Project Work Plan (PWP) will be prepared, which will organize the work into activities, with each element having an identifiable beginning and end. Tasks will match the activities tracked in the Project Schedule. The deliverables associated with each task and its estimated delivery date will be included. The PWP will contain a summary of the task budget, showing labor costs and man-hours allocated to each task.

4.3 **Project Schedule.** A detailed Project Schedule showing all tasks, with their associated start and completion dates, deliverables, and date of delivery to the City, will be developed. The schedule will be developed using Primavera (Suretrak).

4.4 **Progress Reports.** Monthly progress reports describing the work accomplished, products delivered, any problems encountered or anticipated, and the rate of progress of the study, will be prepared. This report will include an updated Project Schedule, summarizing progress and new milestone dates, as necessary. A list of project issues, outstanding decisions, and issues requiring a response from the City will be included in the progress report.

4.5 **Progress Meetings.** Monthly progress meetings will be conducted at the M&E/CE JV team project office to review project progress, project methods and preliminary findings with the City. Additional informal meetings may be called at any time for coordination. The M&E/CE JV team will provide minutes from the progress and any other meetings.

4.6 **Monthly Invoices**. Monthly invoices will be prepared and provided to the City Project Manager. A progress report identifying the work completed during the invoicing period for which payment is being requested will be included.

4.7 **EBO Reports**. Monthly EBP reports will be prepared and submitted to Contract Compliance per our current contract requirements.

4.8 **Quality Assurance.** All work will be compliant with the procedures and review requirements of the Quality Management System (QMS) operated by the M&E/CE JV team. This includes periodic, independent review of the project by suitable, qualified personnel who are not directly involved with the project. The project will also be subject to regular internal review to ensure that it is on schedule, within budget and providing deliverables of suitable quality. All subcontractors who will provide services for this project will also be compliant with these procedures and subject to regular review. The unit prices included herein include all QA/QC procedures required to ensure that 98% of the digitized structures, ID assignments, and attribute information are captured and correctly assigned.

4.9 **Initial Data Evaluation Report**. In order to ensure a full and complete transfer of the data from the City to the M&E/CE JV team within 2 weeks of receiving the initial basin data for a basin for which the City is requesting assistance (e.g. copies of stormwater inventory maps, attribute data, etc.) the M&E/CE JV team shall review the data for completeness and submit to the City a list of the data which is missing.

4.10 **Basin Summary Reports.** These reports will include the following:

- Overview of the project methodology used in performing the inventory work associated with the basin

- Overview of the QA/QC methods used to check the data, including a summary of the final QA/QC results

- Storm water inventory tabulation compatible with Maximo data base, and including all attribute fields

- Missing Data summary table

- A copy of the stormwater inventory maps in standard format (Sample copy of drawings to be included in all reports. Up to two reports to include full sets of drawings at no additional charge.)

4.11 **Field Data Collection SOP.** Under this activity the SOP for collecting the field data to supplement and update information captured from the existing maps will be developed. This SOP will include field verification of the designation of a stormwater structure as being public or private, and the field verification of public structures as being the responsibility of the Federal Government (e.g. DOT), the state of Georgia, or the City of Atlanta.

4.12 **Private vs. Public SOP.** Under this task the standard operating procedure (SOP) for designating stormwater structures as public or private will be developed. This activity includes testing of the proposed methodology to ensure that the end product will be acceptable to the City. This SOP is anticipated to include criteria similar to the following:

- All storm water structures located within the street limits, back of curbing, sidewalk, up to and including an additional 15 feet in back of curb, will be identified as public structures.
- All interconnecting piping between two public structures will be considered publicly owned provided: it is also located within the right of way limits, including the 15 feet from back of curb.
- All outfall structures located within 25 feet from back of curb, and which clearly are piped directly from publicly owned inlet structures located within the right of way, will be considered public structures.
- All storm water inlets located beyond 15 feet from back of curb, including private extension piping will be considered private structures.
- Outfalls draining to known waters of the state and located within 25 feet of the waterway will be considered public structures.
- Interconnecting pipelines, flumes, and other man made conveyance structures, located between a public and private structure will be considered public for that portion located within the right of way and up to 15 feet beyond the back of curb. All such structures located beyond 15 feet from back of curb, will be considered private structures.
- All storm water inlet structures located as part of the City's combined sewer system will be identified as public and also have separate ID numbers so that these structures may be tracked separately.
- All questionable connections will be identified separately, and immediately brought to the attention of the City's designated Project Manager.

4.13 **Federal/State/City SOP.** Under this task the standard operating procedure (SOP) for designating stormwater structures as being the responsibility of the Federal Government, the state of Georgia, or the City of Atlanta will be developed. This activity includes testing of the proposed methodology to ensure that the end product will be acceptable to the City.

4.14 **Development of Standard Mapping Template and .PDF's** of whole storm water system at predetermined scale. Under this activity two standard templates for the stormwater inventory maps will be developed. One template will be entitled Index Map and the other one will be referred to as the Elevation Map. This activity includes testing of the proposed templates to ensure that the end product will be acceptable to the City for printing standardized maps of the whole storm water system.

4.15 **Documentation.**

- Project records, including all project deliverables will be maintained.
- Except as otherwise noted, draft submittals of all deliverables will be made to the City for review and comment. It is expected that comments will be returned to the M&E/CE JV team within 10 days for project minutes, and within 15 days for work plans and reports.
- A review meeting will be conducted if an explanation of the comments is required and a course of action will be agreed upon for each comment.
- The agreed upon changes to the documents and calculations will be incorporated, and the revised documents will be submitted to the City. At the City's request, a final draft version of the document will be submitted such that the City can verify that the requested changes meet with the City's expectations. It is expected that comments on the final draft versions of the document will be returned to the M&E/CE JV team within 10 days.
- Draft documents which are 10 pages or less shall be submitted in an electronic form (Word or Excel) where changes can be tracked.
- Except as otherwise noted, at the City's request hard copies of draft documents (one per team member or meeting attendee) shall be supplied. City team estimated at 6 members.
- Except where Table 1 includes unit prices for specific deliverables, the unit prices for Project Management include the preparation and delivery of all project deliverables.

With respect to review and submittal times, all references to days refer to business/work days.

Task 5: Deliverables

The following deliverables for the storm water system inventory will be submitted:

5.1 Project Work Plan

5.2 Project Schedule

5.3 Monthly Progress Reports

5.4 Meeting minutes

5.5 Monthly invoices (no draft versions required)

5.6 Monthly EBO reports (no draft versions required)

5.7 Initial Data Evaluation Reports (no draft versions required)

5.8 Field Data Collection SOP

5.9 Private vs. Public SOP

5.10 Federal/State/City SOP (as may be requested)

5.11 Basin Summary Reports

5.12 Standard Mapping Template and PDF's of whole storm water system at a predetermined scale

5.13 Shape files or geodatabase

5.14 Final information will be furnished on CD-ROM

Project Schedule

The project will be conducted as expeditiously as possible, with the following milestones based on the date of the kickoff meeting. The following sample schedule is based on business/work days, and would represent a typical project delivery plan for the entire scope of work. The actual schedule will be customized to fit the task assignment that is requested by the City for a particular drainage basin. As these drainage basins vary in terms of size and number of structures, the schedule for accomplishing these activities would likewise vary.

Kickoff Meeting	10 days after NTP
Finalize Work Plan	10 days
Field Inventory	90 days
Geo-Reference PDF Maps	80 days
Develop Database Inventory	90 days
City Review of Deliverables	15 days
Final Deliverables	20 days

Total time frame for study is approximately 230 days after kickoff meeting, unless changed by agreement between the M&E/CE JV team and the City

The attached **Table 3** summarizes the budget and services, on a per basin basis, which will be provided under this Task Order. These items are also presented in a per Unit Pricing format (**Table 2**). This format will better enable the City to customize the selection of activities that it wishes to accomplish for any particular drainage basin. It is understood that the costs included in **Table 3** include all work required to complete the scope

outlined herein. Should the M&E/CE JV team ascertain that the effort required to routinely perform the tasks outlined herein are significantly different than the effort anticipated during the preparation of this proposal, they shall immediately inform the City Project Manager of the situation such that the situation can be resolved before the budget and/or scope become a problem. Problems which are not brought to the attention of the City Project Manager may be deemed ineligible for scope and budget adjustments.

This scope does not include provisions for detailed condition assessment or other piping data of the subject structures, nor does it include complaint file reviews, hydraulic analysis or construction cost estimates for the rehabilitation of damaged or under sized structures. These tasks will have to be completed at a future date under separate Task Orders.

The JV team has enjoyed working on this project with the Department of Watershed Management over the past 1-1/2 years, and looks forward to the opportunity of continuing this relationship well into the future. We remain committed to providing the Department with the best mapping and inventory work products available today. Please contact me at 404-541-0825 should you have any questions or require additional information regarding this matter.

Sincerely,

Rosanne Cardozo, P.E.
President
Cardozo Engineering, Inc.

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

	ATLANTA DRAINAGE BASIN INVENTORY					MISCELLANEOUS ITEMS TO BE INCLUDED IN ADDITION TO BASIN SUBTOTALS						
						SOP for Fieldwork						$3,500
						SOP for Public/Private Designation						$3,500
						Tag Structures as Private vs. Public						$30,000
	X = Ga Tech says they have scanned					DOT Buffer Determination						$10,000
						Scan Attributes & Convert: Assume 42,694 structures * page/12 structures * $3.50						$14,000
						Tag Attributes						$30,000
						Subtotal						**$91,000**
						Scan	**Georef**	**Digitize**	**ID**	**Field**	**PM**	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	LONG ISLAND CREEK BASIN											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Create Shape Files**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	1		F-2			Map Missing	$6.75					
2	2		F-3		396	Map Missing	6.75			$10,098	$12,000	
3	3		F-4			Map Missing	6.75					
4	4		F-5			Map Missing	6.75					
5	5	X	F-6				6.75					
6	6		G-2			Map Missing	6.75					
7	7		G-3			Map Missing	6.75					
8	8		H-2			Map Missing	6.75					
Subtotal					396	$0.00	$54.00	$0.00	$0.00	$10,098.00	$12,000.00	$22,152.00
	WEST PEACHTREE/NANCY CREEK BASIN											
	(Miscellaneous Chattahoochee River Basin)											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Create Shape Files**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	9		E-6		384	Map Missing	6.75			$9,792	$12,000	
2	10		E-7			Map Missing	6.75					
3	11	X	E-8					Done				
4	12	X	E-9					Done				
5	13	X	F-6					Done				
6	14	X	F-7					Done				
7	15	X	F-8					Done				
8	16	X	F-9					Done				
Subtotal					384	$0.00	$13.50	$0.00	$0.00	$9,792.00	$12,000.00	$21,805.50

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	NANCY CREEK BASIN											
No. Maps in Basin	NUMBER	MAPPED	UN-MAPPED	MAPPED (NO INDEX)	Number of Structures	Scan	Georef	Digitize	ID	Field	PM	Total
1	17	2410-01			2,500	Done	Done	$15,000			$7,500	
2	18	2410-02				Done	Done					
3	19	2410-03				Done	Done					
4	20	2410-04				Done	Done					
5	21	2319-01				Done	Done					
6	22	2319-02				Done	Done					
7	23	2319-03				Done	Done					
8	24	2319-04				Done	Done					
9	25	2329-01				Done	Done					
10	26	2329-02				Done	Done					
11	27	2430-01				Done	Done					
12	28	2430-02				Done	Done					
13	29	2430-03				Done	Done					
14	30	2430-04				Done	Done					
15	31	2441-03				Done	Done					
16	32	2421-03				Done	Done					
17	33	2421-04				Done	Done					
18	34	2420-01				Done	Done					
19	35	2420-02				Done	Done					
20	36	2420-03				Done	Done					
21	37	2420-04				Done	Done					
22	38	2431-03				Done	Done					
23	39	2431-04				Done	Done					
24	40	2339-01				Done	Done					
25	41	2339-02				Done	Done					
26	42	2440-01				Done	Done					
27	43	2440-03				Done	Done					
28	44	2440-04				Done	Done					
Subtotal					2,500	$0.00	$0.00	$15,000.00	$0.00	$0.00	$7,500.00	$22,500.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	PEACHTREE CREEK											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Georef**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	45	F-6			341	$82.50	$1,171.50	Done	$682		$33,750	
2	46	F-7			341			Done	$682			
3	47	F-8			341			Done	$682			
4	48	F-9			341			Done	$682			
5	49	F-10			341			Done	$682			
6	50	G-6			341			Done	$682			
7	51	G-7			341			Done	$682			
8	52	G-8			341			Done	$682			
9	53	G-9			341			Done	$682			
10	54	G-10			341			Done	$682			
11	55	H-5			341			$2,046				
12	56	H-6			341			$2,046				
13	57	H-7			341			$2,046				
14	58	H-8			341			$2,046				
15	59	H-9			341			$2,046				
16	60	H-10			341			Done	$682			
17	61	H-11			341			$2,046				
18	62	I-5			341			$2,046				
19	63	I-6			341			$2,046				
20	64	I-7			341			$2,046				
21	65	I-8			341			$2,046				
22	66	I-9			341			$2,046				
23	67	I-10			341			Done	$682			
24	68	I-11			341			Done	$682			
25	69	I-12			341			Done	$682			
26	70	I-13			341			$2,046				
27	71	J-8			341			$2,046				
28	72	J-9			341			$2,046				
29	73	J-10			341			$2,046				
30	74	J-11			341			$2,046				
31	75	J-12			340			$2,040				
32	76	J-13			340			$2,040				
33	77				340			$2,040				
Subtotal					11,250	$82.50	$1,171.50	$38,856.00	$9,548.00	$0.00	$33,750.00	$83,408.00
	NORTH FORK -- PEACHTREE CREEK BASIN											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Update Shape Files**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	78	J-6			420		6.75	Digitize	Done	Done	$600	
2	79	J-7					6.75					
3	80	K-6					6.75					
4	81	K-7					6.75					
5	82											
6	83											
7	84											
Subtotal					420	$0.00	$27.00	$0.00	$0.00	$0.00	$600.00	$627.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	INDIAN CREEK BASIN											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Georef**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	85	J-4			124	$15.00	$36.00	Done	$248		$2,220	
2	86	J-5			124			Done	$248			
3	87	J-6			123			$738	$246			
4	88	K-4			123			Done	$246			
5	89	K-5			123			Done	$246			
6	90	K-6			123			Done	$246			
Subtotal					740	$15.00	$36.00	$738.00	$1,480.00	$0.00	$2,220.00	$4,489.00
	SOUTH FORK -- PEACHTREE CREEK BASIN											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Update Shape Files**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	91	2348-01			778		6.75	Done	Done	Done	$750	
2	92	2348-03					6.75					
3	93	2338-02					6.75					
4	94	2338-04					6.75					
5	95	2347-01					6.75					
6	96	2347-03					6.75					
7	97	2337-02					6.75					
8	98	2337-04					6.75					
9	99		1396-04		550					$14,025.00	$1,650	
10	100		2306-01									
11	101		2306-02									
12	102		2307-01									
13	103		2307-03									
14	104		2346-01									
15	105		2346-02									
16	106		2347-03									
17	107		2347-04									
18	108		2356-01									
19	109		2357-03									
Subtotal					1,328	$0.00	$54.00	$0.00	$0.00	$14,025.00	$2,400.00	$16,479.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	SANDY CREEK											
No. Maps in Basin	NUMBER	MAPPED	UN-MAPPED	MAPPED (NO INDEX)	Number of Structures	Scan	Update Shape Files	Digitize	ID	Field	PM	Total
1	110	1386-01			1,888		$6.75	Done	Done	Done	$1,050	
2	111	1386-02					6.75	Done	Done	Done		
3	112	1396-01					6.75	Done	Done	Done		
4	113	1396-02					6.75	Done	Done	Done		
5	114	1396-03					6.75	Done	Done	Done		
6	115	1396-04					6.75	Done	Done	Done		
7	116	1397-01					6.75	Done	Done	Done		
8	117	1397-02					6.75	Done	Done	Done		
9	118	1397-03					6.75	Done	Done	Done		
10	119	1397-04					6.75	Done	Done	Done		
11	120	1398-03					6.75	Done	Done	Done		
12	121	1398-04					6.75	Done	Done	Done		
13	122	2206-01					6.75	Done	Done	Done		
14	123	2306-01					6.75	Done	Done	Done		
15	124	2306-02					6.75	Done	Done	Done		
16	125	2306-04					6.75	Done	Done	Done		
17	126	2307-01					6.75	Done	Done	Done		
18	127	2307-03					6.75	Done	Done	Done		
Subtotal					1,888	$0.00	$121.50	$0.00	$0.00	$0.00	$1,050.00	$1,171.50

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	PROCTOR CREEK											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Georef**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	128	D-7			200	Map Missing			$400		$18,000	
2	129	D-8			200	$75.00	$1,065.00	Done	$400			
3	130	D-9			200			Done	$400			
4	131	D-10			200			Done	$400			
5	132	D-11			200			Done	$400			
6	133	E-6			200	Map Missing		$1,200				
7	134	E-7			200	Map Missing		$1,200				
8	135	E-8			200			$1,200				
9	136	E-9			200			$1,200				
10	137	E-10			200			$1,200				
11	138	E-11			200			$1,200				
12	139	E-12			200			$1,200				
13	140	E-13			200			$1,200				
14	141	F-9			200			$1,200				
15	142	F-10			200			$1,200				
16	143	F-11			200			$1,200				
17	144	F-12			200			$1,200				
18	145	F-13			200			$1,200				
19	146	G-10			200			$1,200				
20	147	G-11			200			$1,200				
21	148	G-12			200			$1,200				
22	149	G-13			200			$1,200				
23	150	G-14			200			$1,200				
24	151	H-10			200			Done	$400			
25	152	H-11			200			Done	$400			
26	153	H-12			200			Done	$400			
27	154	H-13			200			$1,200				
28	155	H-14			200			$1,200				
29	156	I-12			200			Done	$400			
30	157	I-13			200			$1,200				
Subtotal					6,000	$75.00	$1,065.00	$25,200.00	$3,600.00	$0.00	$18,000.00	$47,940.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	UTOY CREEK BASIN											
No. Maps in Basin	NUMBER	MAPPED	UN-MAPPED	MAPPED (NO INDEX)	Number of Structures	Scan	Georef	Digitize	ID	Field	PM	Total
1	158	A-13			84	Map Missing		$504			$14,100	
2	159	A-14			84	$140.00	$1,988.00	Done	$168			
3	160	A-16			84			Done	$168			
4	161	A-17			84			Done	$168			
5	162	A-18			84			Done	$168			
6	163	B-13			84			Done	$168			
7	164	B-14			84			Done	$168			
8	165	B-15			84			Done	$168			
9	166	B-16			84			Done	$168			
10	167	B-17			84			Done	$168			
11	168	B-18			84			Done	$168			
12	169	B-19			84			Done	$168			
13	170	C-13			84			Done	$168			
14	171	C-14			84			Done	$168			
15	172	C-15			84			Done	$168			
16	173	C-16			84			Done	$168			
17	174	C-17			84			Done	$168			
18	175	C-18			84			Done	$168			
19	176	C-19			84			Done	$168			
20	177	D-13			84			Done	$168			
21	178	D-14			84			Done	$168			
22	179	D-15			84			$504				
23	180	D-16			84			$504				
24	181	D-17			84			$504				
25	182	D-18			84			$504				
26	183	D-19			84			$504				
27	184	E-13			84			$504				
28	185	E-14			84			$504				
29	186	E-15			84			$504				
30	187	E-16			84			$504				
31	188	E-17			84			$504				
32	189	E-18			84			$504				
33	190	F-13			84			$504				
34	191	F-14			84			$504				
35	192	F-15			84			$504				
36	193	F-16			84			$504				
37	194	F-17			84			$504				
38	195	F-18			84			$504				
39	196	G-14			84			$504				
40	197	G-15			84			$504				
41	198	G-16			84			$504				
42	199	G-17			84	Map Missing		$504				
43	200	G-18			84	Map Missing		$504				
44	201	H-14			84			$504				
45	202	H-15			84			$504				
46	203	P-12			84	Map Missing		$504				
47	204	P-16			84	Map Missing		$504				
48	205	P-17			84	Map Missing		$504				
49	206	P-18			84	Map Missing		$504				
50	207	Q-12			84	Map Missing		$504				

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
51	208	Q-13			84	Map Missing		$504				
52	209	Q-14			84	Map Missing		$504				
53	210	Q-15			83	Map Missing		$498				
54	211	Q-16			83			$498				
55	212	Q-17			83			$498				
56	213	Q-18			83	Map Missing		$498				
Subtotal					4,700	$140.00	$1,988.00	$18,120.00	$3,360.00	$0.00	$14,100.00	$37,708.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	INTRENCHMENT CREEK											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Georef**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	214	2326-03			5,429	$37.50	$532.50	$32,574			$16,300	
2	215	2326-04										
3	216	2325-02										
4	217	2325-04										
5	218	2336-03										
6	219	2336-04										
7	220	2335-01										
8	221	2335-02										
9	222	2335-03										
10	223	2335-04										
11	224	2334-02										
12	225	2346-03										
13	226	2345-01										
14	227	2345-03										
15	228	2344-01										
Subtotal					5,429	$37.50	$532.50	$32,574.00	$0.00	$0.00	$16,300.00	$49,444.00
	SUGAR CREEK											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Georef**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	229			K-12	120	$40.00	$568.00	Done	$240		$5,760	
2	230			K-13	120			Done	$240			
3	231			S-18	120			$720				
4	232			S-19	120			$720				
5	233			T-16	120	Map Missing		$720				
6	234			T-17	120			$720				
7	235			T-18	120			$720				
8	236			T-19	120			$720				
9	237			T-20	120			$720				
10	238			U-16	120			$720				
11	239			U-17	120			$720				
12	240			U-18	120	Map Missing		$720				
13	241			U-19	120			$720				
14	242			U-20	120			$720				
15	243			V-18	120			$720				
16	244			V-19	120			$720				
Subtotal					1,920	$40.00	$568.00	$10,080.00	$480.00	$0.00	$5,760.00	$16,928.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	SOUTH RIVER CREEK AND FEDERAL PRISION CREEK)											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Georef**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	245			G-16							$30,465	
2	246			G-17		Map Missing						
3	247			G-18		Map Missing						
4	248			H-14								
5	249			H-15								
6	250			P-12		Map Missing						
7	251			P-13		Map Missing						
8	252			P-14		Map Missing						
9	253			P-15		Map Missing						
10	254			P-16		Map Missing						
11	255			P-17		Map Missing						
12	256			Q-9								
13	257			Q-10	1,380	$87.50	$1,242.50	$8,280				
14	258			Q-11	7,900	South River		$47,400				
15	259			Q-12	875	Terrel Creek		$5,250				
16	260			Q-13								
17	261			Q-14								
18	262			Q-15								
19	263			Q-16								
20	264			Q-17								
21	265			Q-18		Map Missing						
22	266			Q-19		Map Missing						
23	267			R-10		Map Missing						
24	268			R-11		Map Missing						
25	269			R-12		Map Missing						
26	270			R-13		Map Missing						
27	271			R-14								
28	272			R-15								
29	273			R-16								
30	274			S-10		Map Missing						
31	275			S-11		Map Missing						
32	276			S-12		Map Missing						
33	277			S-13								
34	278			S-14								
35	279			S-15								
Subtotal					10,155	$87.50	$1,242.50	$60,930.00	$0.00	$0.00	$30,465.00	$92,725.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATES

						Scan	Georef	Digitize	ID	Field	PM	
						$2.50	$35.50	$6.00	$2.00	$25.50	$12,000	
	CAMP CREEK											
No. Maps in Basin	**NUMBER**	**MAPPED**	**UN-MAPPED**	**MAPPED (NO INDEX)**	**Number of Structures**	**Scan**	**Update Shape Files**	**Digitize**	**ID**	**Field**	**PM**	**Total**
1	280	1384-03			1,400		6.75				$900	
2	281	1384-04					6.75					
3	282	1383-01					6.75					
4	283	1383-02					6.75					
5	284	1383-04					6.75					
6	285	1394-03					6.75					
7	286	1394-04					6.75					
8	287	1393-01					6.75					
9	288	1393-02					6.75					
10	289	1393-03					6.75					
11	290	1393-04					6.75					
12	291	2304-03					6.75					
Subtotal					1,400	$0.00	$54.00	$0.00	$0.00	$0.00	$900.00	$954.00

TABLE 3
ATLANTA DRAINAGE BASIN INVENTORY
COST ESTIMATE SUMMARY

Basin	Approximate Cost
Long Island	$22,152.00
West Peachtree	$21,805.50
Nancy Creek	$22,500.00
Peachtree Creek	$83,408.00
North Fork	$627.00
Indian Creek	$4,489.00
South Fork	$16,479.00
Sandy Creek	$1,171.50
Proctor Creek	$47,940.00
Utoy Creek	$37,708.00
Intrench. Creek	$49,444.00
Sugar Creek	$16,928.00
South River	$92,725.00
Camp Creek	$954.00
System Items	$91,000.00
Total Cost	**$509,331.00**
JV Portion	**$438,291.22**
To Be Completed by Others	$71,039.78
Total Cost	**$509,331.00**

TABLE 2
ATLANTA DRAINAGE BASIN INVENTORY
UNIT PRICES

Activity	Quantity	Units (includes QA/QC)	Unit Pricing
Field Data Collection including QA/QC	1	per structure*	$25.50
Scan Mylar	1	per map*	$2.50
Georeference			
Sheet Control	1	per map*	$7.25
Georeference / Field Rectify	1	per map*	$28.50
Capture Stormwater Stuctures			
Assign Stormwater ID	1	per structure*	$2.00
Digitize Stormwater Structures & Piping, Assign ID (includes piping direction where available)	1	per structure*	$6.00
Assign Attributes to Digitized Stormwater Structures			
Scan Attribute Books & Validate Conversion	1	per page (up to 11" x 17" size)**	$3.50
Additional Attributes (case by case basis)	1	per attribute/per structure*	$2.00
Develop SOPs			
Field Data Collection	1	per system	$3,500
Public vs. Private Designation	1	per system	$3,500
Federal/State/City Designation	1	per system	Time & Materials
Assign Public vs. Private Designation			
Using GIS Overlay & Buffering Techniques	1	per basin	Time & Materials
Case by Case Basis	1	per structure*	$2.00
Assign Federal/State/City Designation			
Using GIS Overlay & Buffering Techniques	1	per basin	Time & Materials
Project Management	1	per basin - varies	See Table 3
Create Shape File	1	map**	$ 6.75
Map Requests			
Create maps	1	per map**	$6.75
Print maps - reproduction costs	1	per map	$23.00
Other Direct Costs			
Hand Held GPS (3)	3	per project	$18,000
Reproduction	1	per project	$2,000
Field Expenses	1	per project	$1,500
Travel	1	per project	$5,500
Communication, Postage	1	per project	$800

*Prices based on 100 unit minimum

**Prices based on performing conversion for an entire basin/subbasin at one time

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE **ATTN: GREG PRIDGEON**

Legislative Counsel (Signature):_Megan S. Middleton

Contact Number:__6207

Originating Department: _Watershed Management

Committee(s) of Purview: __City Utilities

Council Deadline:_November 13, 2006

Committee Meeting Date(s): November 28, 2006__ Full Council Date: December 4, 2006

Commissioner Signature

CAPTION

A RESOLUTION AUTHORIZING THE MAYOR TO ISSUE A NOTICE TO PROCEED WITH METCALF EDDY/CARDOZO, JV, FOR FC-7619-03E, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES, FOR A LOCATION INVENTORY STUDY OF THE STRUCTURES IN THE CITY OF ATLANTA SEPARATE STORM SEWER SYSTEM, ON BEHALF OF THE DEPARTMENT OF WATERSHED MANAGEMENT, IN AN AMOUNT NOT TO EXCEED FOUR HUNDRED THIRTY EIGHT THOUSAND TWO HUNDRED NINETY ONE DOLLARS AND TWENTY TWO CENTS ($438,291.22); ALL CONTRACTED WORK WILL BE CHARGED TO AND PAID FROM FUND, ACCOUNT AND CENTER NUMBER: 2J01 (WATER & WASTEWATER REVENUE FUND) 524001 (CONSULTANT/PROFESSIONAL SERVICES) Q86001 (NPDES (MS4) COMPLIANCE/POLLUTION DISCHARGE); AND FOR OTHER PURPOSES.

FINANCIAL IMPACT (if any) $438,291.22

Mayor's Staff Only

Received by Mayor's Office: 11.20.06 (date) Reviewed by:

Submitted to Council: 11/20/06 (date)